AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the present application.

LISTING OF THE CLAIMS:

1. (Previously Presented) An apparatus for performing a process for forming a coating on a substrate, including:

a fluidising chamber for establishing a fluidised-bed comprising a fluidising gas and a powder coating composition, thereby effecting tribostatic charging of the powder coating composition,

means for immersing the substrate wholly or partly in the fluidised bed, whereby tribostatically charged particles of the powder coating composition adhere to the substrate, the substrate being either electrically isolated or earthed,

an electrically conductive electrode, to which a voltage is applied, positioned to influence the extent to which charged particles adhere to a region of the substrate,

means for applying the voltage to the electrode,

means for withdrawing the substrate from the fluidised-bed and

means for forming the adherent particles into a continuous coating over at least part of the substrate,

the apparatus being arranged such that the maximum potential gradient existing in the fluidised bed is below the ionisation potential of the fluidising gas.

2. (Original) An apparatus as claimed in claim 1, including a second electrode to which is applied a voltage that is of polarity opposite to the first-identified voltage, the first-identified electrode and the second electrode being on opposite sides of the substrate and the second electrode being positioned to influence the extent to which charged particles adhere to a region of the substrate, and means for applying the voltage of the opposite polarity to the second electrode.

3. (Original) An apparatus as claimed in claim 1, including at least one further electrode adjacent to the first-identified electrode, the further electrode or electrodes being positioned to influence the extent to which charged particles adhere to a respective region of the substrate or respective regions of the substrate, and means for applying a voltage of the same polarity as the first-identified voltage to the further electrode or electrodes.

4. (Original) An apparatus as claimed in claim 3, including a plurality of further electrodes, wherein the further electrodes encompass the substrate.

5. (Previously Presented) An apparatus as claimed in claim 1, wherein the first-identified electrode is in the form of a rod.

6. (Previously Presented) An apparatus as claimed in claim 1, wherein the first-identified electrode is in the form of a plate.

7. (Previously Presented) An apparatus as claimed in claim 2, wherein the electrodes are in the form of plates.

8. (Original) An apparatus as claimed in claim 4, wherein the first-identified electrode and the plurality of further electrodes are elements of a shell encompassing the substrate.

9. (Original) An apparatus as claimed in claim 1, wherein the electrode forms a shell for the substrate.

10. (Original) An apparatus as claimed in claim 9, wherein the shell includes sheet material.

11. (Previously Presented) An apparatus as claimed in claim 8, wherein at least part of the shell consists of an array of rods.

12. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell is tubular in form.

13. (Previously Presented) An apparatus claimed in claim 8, wherein the shell is tubular in form and includes an end closure member at one end.

14. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell is tubular in form and includes end closure members at both ends.

15. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell is cylindrical.

16. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell has a circular transverse cross-section.

17. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell has an oval transverse cross-section.

18. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell has a rectangular transverse cross-section.

19. (Previously Presented) An apparatus as claimed in claim 8, wherein the shell has a plurality of electrically isolated portions and wherein the apparatus includes means for applying respective voltages to the separate portions.

20. (Previously Presented) An apparatus as claimed in claim 1, wherein at least a part of the fluidising chamber is electrically conductive and wherein the apparatus includes means for applying a voltage to the conductive part of the fluidising chamber.

21. (Previously Presented) An apparatus as claimed in claim 1, wherein the walls of the fluidising chamber are electrically non-conductive.

22. (Cancelled).

23. (Cancelled).

24. (Cancelled).

25. (Cancelled).

26. (Previously Presented) A process for forming a coating on a substrate, including the steps of:

establishing a fluidised bed comprising a fluidising gas and a powder coating

composition, thereby effecting tribostatic charging of the powder coating composition,

immersing the substrate wholly or partly in the fluidised bed, whereby tribostatically charged particles of the powder coating composition adhere to the substrate, the substrate being either electrically isolated or earthed,

providing an electrically conductive electrode in the fluidised bed,

applying a voltage to the electrically conductive electrode, the electrode being positioned, in relation to the substrate, where the extent to which charged particles adhere to regions of the substrate is influenced by the electrode,

withdrawing the substrate from the fluidised-bed and

forming the adherent particles into a continuous coating over at least part of the substrate,

the process being conducted such that the maximum potential gradient existing in the fluidised bed is below the ionisation potential of the fluidising gas.

27. (Original) A process as claimed in claim 26, including the insertion of a second electrode on the opposite side of the substrate relative to the first-identified electrode, the second electrode being positioned to influence the extent to which charged particles adhere to a region of the substrate, and applying, to the second electrode, a voltage that is of polarity opposite to the first-identified voltage.

28. (Original) A process as claimed in claim 26, including the insertion of at least one further electrode adjacent to the first-identified electrode, the further electrode or electrodes being positioned to influence the extent to which charged particles adhere to a respective region of the substrate or respective regions of the substrate, and applying, to the further electrode or electrodes, a voltage of the same polarity as the first-identified voltage.

29. (Previously Presented) A process as claimed in claim 26, wherein the substrate is either electrically non-conductive or poorly conductive.

30. (Previously Presented) A process as claimed in claim 26, wherein the substrate

comprises a medium density fibreboard (MDF).

31. (Previously Presented) A process as claimed in claim 26, wherein the substrate comprises wood.

32. (Previously Presented) A process as claimed in claim 26, wherein the substrate comprises a wood product.

33. (Previously Presented) A process as claimed in claim 26, wherein the substrate comprises a plastics material.

34. (Previously Presented) A process as claimed in claim 33, wherein the substrate comprises a plastics material including an electrically conductive additive.

35. (Previously Presented) A process as claimed in claim 33, wherein the plastics material comprises polyamide.

36. (Previously Presented) A process as claimed in claim 26, wherein the substrate comprises a plastics material having a surface resistance above 10^{11} ohms/square.

37. (Original) A process as claimed in claim 36, wherein the plastics material comprises polycarbonate.

38. (Previously Presented) A process as claimed in claim 26, wherein the surface resistance of the substrate is of the order of at least 10^3 ohms/square.

39. (Previously Presented) A process as claimed in claim 26, wherein the surface resistance of the substrate is of the order of from 10^3 to 10^5 ohms/square.

40. (Previously Presented) A process as claimed in claim 26, wherein the surface resistance of the substrate is of the order of at least 10^5 ohms/square.

41. (Previously Presented) A process as claimed in claim 26, wherein the surface resistance of the substrate is of the order of from 10^5 to 10^{11} ohms/square.

42. (Previously Presented) A process as claimed in claim 26, wherein the surface resistance of the substrate is of the order of at least 10^{11} ohms/square.

43. (Previously Presented) A process as claimed in claim 26, wherein the substrate is an electrically conductive substrate.

44. (Previously Presented) A process as claimed in claim 33, including the step of heating the plastics material to a temperature below its melting point and below the transition point of the powder coating composition before immersing the substrate in the fluidised bed.

45. (Previously Presented) A process as claimed in claim 33, including the step of pre-charging the substrate before immersing it in the fluidised bed.

46. (Original) A process as claimed in claim 45, including the step of equalising the charge on the substrate before immersing the substrate in the fluidised bed.

47. (Original) A process as claimed in claim 46, including the step of heating the substrate to a temperature below its melting point in order to equalise the charge.

48. (Original) A process as claimed in claim 46, including the step of moistening the surface of the substrate in order to equalise the charge.

49. (Previously Presented) A process as claimed in claim 26, wherein there is no preheating of the substrate prior to immersion in the fluidised bed.

50. (Cancelled).

51. (Cancelled).

52. (Previously Presented) A process as claimed in claim 26, wherein the potential gradient between the electrode or electrodes and the substrate is of the order of between 0.1 kV/cm and 5 kV/cm, both limits included.

53. (Previously Presented) A process as claimed in claim 52, wherein the potential gradient is of the order of between 0.1 kV/cm and 0.5 kV/cm, both limits included.

54. (Previously Presented) An apparatus as claimed in claim 52, wherein the potential gradient is of the order of between 0.2 kV/cm and 1 kV/cm, both limits included.